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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/747,866      | 12/29/2003  | Richard Rivera       | TROPIP.041DV1       | 2806             |

20995 7590 08/10/2005

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| EXAMINER |
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CHAN, KO HUNG

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3632

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/747,866             |  | RIVERA, RICHARD     |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Korie H. Chan          |  | 3632                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/31/05
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-12,15-18 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-12,15-18 and 20-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 112***

Claims 24 and 27-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 24 "the top segment means" is inconsistent with the first claimed "top segment" in claim 1. Regarding claim 27, "the curved section" is inconsistent with the first claimed "curved segment".

***Claim Rejections - 35 USC § 103***

Claims 1-5, 7-10, 12, 16-18, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderminden, Sr. (US patent no. 5,599,064) in view of Berry (US patent no. 2,450,869) and Rowland et al (US patent no. 2,533,511). Vanderminden discloses two C-shaped springs (25) connected by a horizontal support ((29) with downward post (22) wherein the C-spring is made of aluminum (Col. 2, line 52). However, Vanderminden does not disclose providing channel or two channels on the C-shaped spring. To provide a channel in a leaf spring to distribute stress and reduce weight is old and well-known in the art as demonstrated by Berry (Col. 1, lines 30-50). Berry also contemplates that such channel and plate maybe constant (Col. 2, lines 36-40) in cross-section such that they are flat. Rowland teaches a C-shaped spring (figures 5-14) having longitudinal channels (15, 16) on outer surface and flat inner surface and with first and second adjacent ends (5) and with thicker side portion (side of figure 14) and thin center portion (15) such that stress on the spring under loading are substantially constant throughout the major portion of the spring (Col. 3, lines 1-6). It would have been obvious to one of ordinary skill in the art to have modify the springs of

Vanderminden such that channel or channels such that they are of uniform cross-section as taught by Berry and to have the channel or channels extend from a first end to a second end as taught by Rowland for even distribution of stress of the spring under loading as well as reduction in weight as taught to be desirable by Berry and Rowland. Regarding claim 12, it would have been an obvious matter of design choice to have the side portion 30% thicker than the center portion since applicant has not disclose such specific dimension is critical or of particular advantage. Moreover, it appears other percentage of thickness would perform as well. Regarding claims 20-22, method steps of making the apparatus would have been obvious given the device of the above combination.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderminden, Sr. (US patent no. 5,599,064) in view of Berry (US patent no. 2,450,869) and Rowland et al (US patent no. 2,533,511) as applied above, and further in view of Holmstrom (US patent no. 3,297,360). Vanderminden, Berry, and Rowland combined disclosed all the claimed features of applicant's invention except for the hole in the first end of elongate member for attachment to component. To attach support to seat member by providing hole in the elongate member for receiving fastener is old and well-known in the art. Holmstrom teaches in a C-shaped spring support having holes (figure 2) at first end for receiving fastener for attachment to the seat member (figure 5). It would have been obvious to one of ordinary skill in the art to provide hole in the first end of C-shaped spring of Vanderminden, Berry, and Rowland combined for receiving fastener for attachment to the seat member as taught by Holmstrom. Regarding claim

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19, the method step of making the spring would have been obvious given the spring of Vanderminden, Rowland, and Holmstrom combined.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderminden, Sr. (US patent no. 5,599,064) in view of Berry (US patent no. 2,450,869) and Rowland et al (US patent no. 2,533,511) as applied above, and further in view of Holmstrom (US patent no. 3,297,360) and Mangnuson et al (US patent no. 5,655,816). Vanderminden, Berry, Rowland, and Holmstrom combined disclosed all the claimed features of applicant's invention (see rejection of claim 11 above) except for the hole being a slot. To substitute a fastener receiving hole with a fastener receiving slot has the well-known advantage of adjustment along the slot. Mangnuson teaches a mounting (58, figure 2) to a chair having a slot (58f). It would have been obvious to one of ordinary skill in the art to have modify the hole of Vanderminden, Sr., Rowland and Holmstrom combined such that it is of a slot as taught by Mangnuson to facilitate adjustability along the slot.

### ***Response to Arguments***

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Korie H. Chan whose telephone number is 571-272-6816. The examiner can normally be reached on Monday - Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on 571-272-6788. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Korie H. Chan  
Primary Examiner  
Art Unit 3632

khc  
August 4, 2005